

## Patient information from the BMJ Group

# Irritable bowel syndrome

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## Irritable bowel syndrome

Irritable bowel syndrome (IBS) can cause a lot of pain and distress, but it doesn't lead to more serious illnesses. There's no cure, but there are treatments that can help your symptoms.

We've brought together the best research about IBS and weighed up the evidence about how to treat it. You can use our information to talk to your doctor and decide which treatments are best for you.

## What is irritable bowel syndrome?

Irritable bowel syndrome (IBS) stops your bowels working properly. This can cause pain in your abdomen, cramps, bloating, constipation, or diarrhoea.

IBS can make you anxious. A lot of people worry that their symptoms are linked to something serious, like cancer. But IBS doesn't lead to more serious illnesses.

There's no cure for IBS, but treatment can help your symptoms. There are also things you can do for yourself which may help.

IBS is also called spastic colon, nervous colon, or irritable colon.

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### Key points for people with irritable bowel syndrome

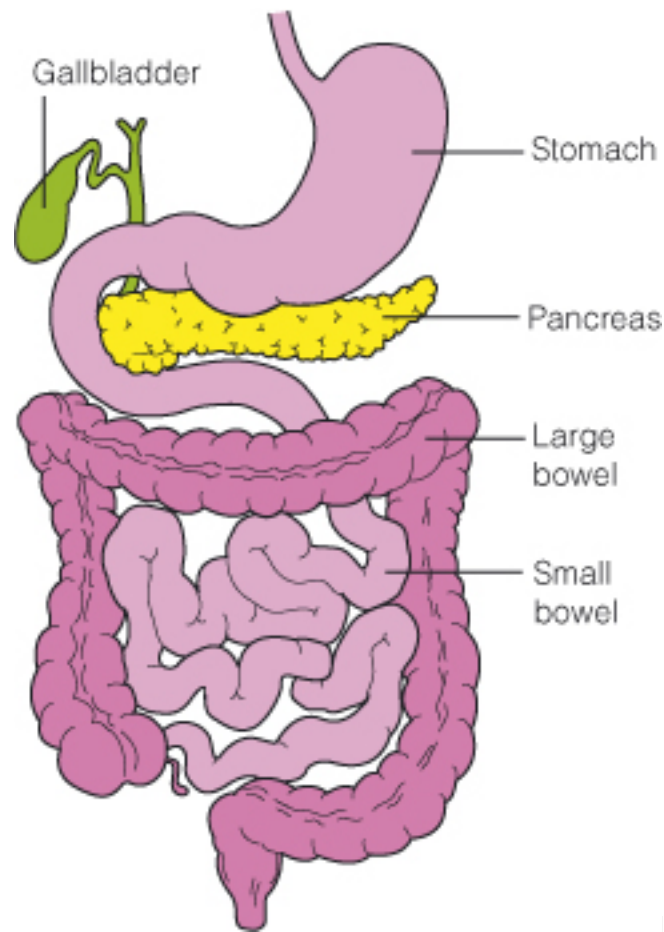


IBS can be uncomfortable but treatments can help.

- IBS is very common. It affects about 1 in 6 people. Twice as many women as men are affected.
- IBS can cause a lot of pain. But it doesn't lead to more serious diseases, such as cancer.
- There's no cure for IBS. But there are treatments that can improve your symptoms.
- Your doctor may try to help your symptoms without using drugs, and will probably recommend that you take drugs only when you really need them.
- If you have IBS, there are things you can do for yourself which might help, such as learning to deal with stress.
- Learning as much as you can about IBS will help you cope better.

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## How your bowels normally work



Your bowels run from your stomach to your back passage (rectum).

To understand what goes wrong when you have irritable bowel syndrome, it helps to know a little about how your bowels normally work. Your bowels are also known as your intestines.

Your bowels form a long tube that runs from your stomach to your back passage (rectum). Their job is to break down the food you eat so nutrients can pass into your bloodstream. Once this is done, your bowels carry away the waste.

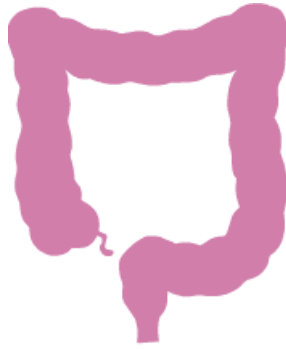
Your bowels have two parts. These are called the small bowel and the large bowel (or small and large intestine).

The outer wall of your bowels is made up of muscles. Like all muscles, they can contract and relax.

But you can't control how these muscles move. They contract and relax automatically to push food and waste along.

Here's what happens. <sup>[1]</sup>

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Muscles push food through your bowels.

- After you eat, food goes down to your stomach and then into your bowels.
- Muscles push the food through the small bowel.
- The nutrients and water from your food are absorbed into your bloodstream.
- The waste that your body doesn't need is left over. It forms solid lumps (stools).
- Muscles push the waste through your colon. This is the first 2 metres (6 feet) of your large bowel.
- The waste is pushed into your rectum. This is the last 20 to 25 centimetres (8 to 10 inches) of your large bowel.
- The food waste leaves your body through your **anus**.
- Your anus is surrounded by a ring of muscles called your sphincter muscles. The sphincter muscles relax so you can empty your bowels.

### What goes wrong?

Doctors aren't sure what happens in your body when you have irritable bowel syndrome. But they think that the muscles which make up the wall of your bowels don't work in the normal way. [\[2\]](#) [\[3\]](#) [\[4\]](#)

Doctors think the movement of these muscles can change in several different ways.

- The muscles work faster than normal. This means they push the waste through more quickly. Less water is absorbed from the food, which makes your stools soft and watery. This can cause diarrhoea. You may need to go to the toilet a lot and feel you need to go urgently.
- The muscles may push the waste along more slowly. This means that waste can stay in your bowels for a long time. If this happens, too much water is absorbed from

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the waste. This can cause constipation. Your stools then become hard and going to the toilet is uncomfortable.

- The muscles may go into spasm. You get spasms when your muscles suddenly contract. The contraction is very strong and can cause painful cramps. If you have spasms, waste or gas from food may get trapped in your bowels. This can make you feel bloated.
- The muscles in your bowels may no longer work together with other muscles.<sup>[5]</sup> This means the stools don't move smoothly through your bowels. You may get a painful urge to go to the toilet but find you can't. Or you may go to the toilet but feel that you haven't completely finished emptying your bowels.

### What causes irritable bowel syndrome?

We don't know what causes the muscles of your bowels to stop working properly. There's no obvious cause that doctors can test for. People with irritable bowel syndrome don't have any serious abnormality in their bowels. There are probably several different things that act together to cause your symptoms.<sup>[6]</sup>

Doctors think that one important cause is a disruption in the messages which are sent between your brain and your bowels. This means that your brain may be sending the wrong messages to the nerves controlling the muscles of your bowels. Your brain may do this when you are under stress or feeling anxious.<sup>[7]</sup>

That doesn't mean IBS is 'all in the mind'. Your pain and your symptoms are real. But it explains why changes in your mood or emotions could cause the physical symptoms of IBS.

To read more, see [Your brain and your bowels](#) .

Some things that seem to cause IBS are:

- Sensitive bowels. People with IBS are more sensitive to pain in their bowels.<sup>[8]</sup> <sup>[9]</sup>  
<sup>[10]</sup> We don't know exactly why
- An infection. An **infection** seems to trigger IBS in some people.<sup>[11]</sup> Almost a quarter of people in one study got IBS after a stomach or bowel infection<sup>[12]</sup>
- High stress levels. If something stressful happens in your life, it may set off symptoms of IBS. Stressful events could include work difficulties, marriage problems, a death in the family or an operation. Half the people in one study thought their symptoms were triggered by something stressful happening. But not all research shows that stress is a trigger. Some research shows stress can make IBS worse, but not cause it.<sup>[7]</sup>

### Irritable bowel syndrome: why me?

The things that make it more likely you'll get IBS are called risk factors. You're more likely to get IBS if:

- You're a woman.<sup>[13]</sup> <sup>[14]</sup> Up to twice as many women as men have IBS.
- Other people in your family have it.<sup>[15]</sup> <sup>[16]</sup> <sup>[17]</sup> You're more than twice as likely to get IBS if a close relative has had it.<sup>[15]</sup> Studies of twins have found that your **genes** may play a part in whether you get IBS.<sup>[16]</sup> <sup>[17]</sup> But your upbringing after you are born may be just as important.<sup>[16]</sup>
- You have **anxiety** or **depression**. Feeling anxious or depressed is more common among people with IBS.<sup>[12]</sup>
- You have been sexually abused. Almost a third of people in one study who consulted a doctor for IBS had been sexually abused.<sup>[18]</sup> But this doesn't mean if you have IBS it has been caused by sexual abuse.

Unlike many long-term conditions, IBS is more likely to appear when you are young or middle-aged than when you are older. Symptoms of IBS start before the age of 50 in half of all people who are diagnosed. About 40 in 100 people with IBS are aged between 35 and 50.<sup>[19]</sup>

### What are the symptoms of irritable bowel syndrome?

Irritable bowel syndrome (IBS) affects people in different ways. But everyone with IBS gets pain and discomfort. You may also have diarrhoea, constipation, or bouts of both. You may sometimes feel bloated.

Some people with IBS only have mild symptoms for short periods. Others have unpleasant symptoms that last a long time. Many people have occasional flare-ups of their symptoms, often during times of stress.

You get symptoms because your bowels aren't working properly. Bear in mind that although IBS can be unpleasant, there is nothing seriously wrong with your bowels. IBS doesn't lead to more serious illnesses, like cancer.

Although symptoms vary a lot from person to person, there are four key symptoms.<sup>[20]</sup>  
<sup>[21]</sup>

- **Pain.** You may feel pain or discomfort in parts of your abdomen. The pain may be very bad. It may move around, and you may not be able to say exactly where it is. The pain may come and go. If you are a woman, it may get worse when you have your period. The pain may go away when you go to the toilet or break wind.

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- Bloating. You may be bloated or have a feeling of fullness in your abdomen. You may pass more wind than usual.
- Diarrhoea. Your stools may become loose and watery. You may need to go to the toilet more often, or feel you need to go urgently.
- Constipation. Your stools may become small and hard. Going to the toilet may be difficult or uncomfortable.

You get these symptoms because the muscles that form the wall of your bowels aren't working as they should.

- Your muscles might be contracting (tightening) too quickly, so the food in your bowels gets pushed along too fast. There isn't time for water from the food to be absorbed into your bloodstream, so your stools become watery and you get diarrhoea.
- Or the muscles may work very slowly or even stop working for a while. This means the food stays in your bowels for a long time. A lot of water gets absorbed into your bloodstream from the food. Your stools become hard and difficult to pass, making you constipated.
- The muscles in your colon may also go into spasm and cause cramping pain. Spasms are sudden, strong muscle movements that come and go. If you have spasms, gas, or waste from food can get trapped in your colon. This can make you feel bloated.

Some people with IBS get diarrhoea. Others have constipation, and some people have bouts of both. Lots of people with IBS have a feeling of not fully emptying their bowels when they go to the toilet. You may also pass mucus when you go to the toilet. (Mucus is a thick fluid made in several parts of your body, including your bowels.)

### Other symptoms

You may have other symptoms that affect your stomach, such as burping or feeling sick.

<sup>[20]</sup> And you could get symptoms that don't seem connected with your bowels. You may:  
<sup>[7]</sup>

- Feel the need to pass urine frequently
- Get painful periods
- Get back pain
- Feel tired often
- Have trouble sleeping

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- Get headaches
- Get pain in your jaw and face
- Get pain and stiffness in some of your muscles (fibromyalgia).

Doctors don't really know why people with IBS have these problems. It may be that people with IBS worry more about their health, so they are more likely to go to their doctor with these kinds of problems. Or it may be that the things that cause IBS also cause other problems. For example, if you are under stress, this could affect other parts of your body too.

### More serious illnesses

Symptoms similar to IBS may occasionally be a sign of something more serious. You should see your doctor if you: <sup>[20]</sup>

- Pass blood in your stools. But bear in mind most people with blood in their stools only have piles ( haemorrhoids )
- Lose weight for no reason
- Feel very tired all the time. You could be anaemic . Anaemia is when you don't have enough oxygen-carrying red blood cells. This can happen if you've been bleeding because of another condition in your bowels, such as small growths (polyps) or cancer
- Feel a lump in your abdomen
- Have a fever
- Get symptoms for the first time after the age of 50.

### How do doctors diagnose irritable bowel syndrome?

There isn't one test that can tell your doctor whether you have irritable bowel syndrome (IBS). It's not a disease that will show up on a scan.

Your doctor will decide if you have IBS by asking you questions about your symptoms and ruling out other illnesses. <sup>[37]</sup>

### Your symptoms

Your doctor will ask you about your symptoms and any health problems you've had in the past. If you've had any of the following symptoms for at least six months, you may have IBS: <sup>[37]</sup>



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- Changes in your bowel habit (for example, you get diarrhoea or constipation)
- Pain or discomfort in your abdomen
- A bloated feeling.

For your doctor to diagnose IBS, one of the following must also be true:<sup>[37]</sup>

- You have pain or discomfort that goes away when you go to the toilet
- You have pain or discomfort that is accompanied by a change in how often you have bowel movements or in how your stools look (they might be harder or softer).

And two of the following must be true:<sup>[37]</sup>

- You've had a change in how you pass stools. For example, you may need to go to the toilet urgently or strain to pass stools, or feel as if you haven't completely emptied your bowels
- You have bloating, tension, or hardness in your abdomen
- Your symptoms feel worse after you eat
- You pass mucus from your rectum. Mucus is a thick fluid made in several parts of your body, including your bowels.

Your doctor may also ask whether you get pain in just one spot in your abdomen or if it moves around. In IBS, the pain doesn't usually stay in the same place.

You might also have other symptoms, such as backaches, nausea, feeling tired, having to pass urine frequently or urgently, and occasionally leaking stool. Not everyone has these symptoms, but they can help confirm the diagnosis of IBS.

### Tests

Your doctor will probably order some blood tests. These are to rule out other, more serious diseases. These tests check for:<sup>[37]</sup>

- **Anaemia** . Anaemia means you don't have enough oxygen-carrying red blood cells. This can happen if you've been bleeding because of another condition in your bowels, such as small growths (polyps) or cancer.
- Signs of more serious problems in your bowels. These include inflammatory bowel disease and coeliac disease. To read more, see [Other problems in the bowels](#) .

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Blood tests are probably the only tests you'll need, unless your doctor suspects you might have another illness. If so, you'll probably be referred to a specialist. To read more about other tests, see [Further tests to rule out other illnesses](#) .

### When you need to go to a specialist

People with IBS often have tests or operations that turn out not to be necessary. Some get referrals to specialist doctors for illnesses that have nothing to do with their bowels. <sup>[20]</sup> This may be because it can be difficult for doctors to be sure about a diagnosis of IBS. <sup>[7]</sup>

To help doctors avoid sending people for unnecessary tests, there is guidance about when to send people to a specialist. The guidance says that your GP should refer you if you: <sup>[37]</sup>

- Lose weight for no reason
- Have bleeding from your rectum or blood in your stools (although most people with these symptoms only have piles, also called [haemorrhoids](#) )
- Have a family history of [ovarian cancer](#) or [bowel cancer](#)
- Are over age 60 and have had looser or more frequent stools for more than six weeks
- Have [anaemia](#) . This can make you feel tired all the time. It can happen if you've been bleeding because of another condition of the bowels, such as small growths (polyps) or cancer
- Have a lump in your abdomen or your rectum
- Have signs that your bowels may be [inflamed](#) . This suggests that your symptoms might be caused by [inflammatory bowel disease](#) .

### Making the diagnosis

If the tests for other illnesses are negative, your doctor will probably diagnose IBS.

### How common is irritable bowel syndrome?

Irritable bowel syndrome (IBS) is very common.

In the UK, more than 20 in 100 women and 10 in 100 men have IBS. <sup>[22]</sup> A study of nearly 5,000 people found that over 15 in 100 people have the condition. <sup>[22]</sup>

However we're not certain about these numbers. This is because doctors diagnose IBS in different ways. The estimates of how many people have it vary depending on how

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researchers diagnose it.<sup>[23]</sup> And most people who have symptoms of IBS seem to cope on their own rather than getting help from their doctor. Although IBS is very common, only about 5 in 100 people see a doctor because of it.<sup>[24]</sup>

Unlike lots of other long-term conditions, IBS tends to appear when people are young or middle-aged, rather than older. Symptoms begin before the age of 50 in half of all people who are diagnosed with IBS. About 40 in 100 people with IBS are aged between 35 and 50.<sup>[19]</sup>

Children can get IBS too. Lots of people can trace the start of their symptoms back to childhood. Symptoms of IBS have been found in 6 in 100 12 to 13 year olds, and in 14 in 100 15 to 16 year olds.<sup>[19]</sup>

### What treatments work for irritable bowel syndrome?

Irritable bowel syndrome (IBS) affects the way your bowels work. The symptoms can cause a lot of discomfort. If you have IBS, you can get painful cramps, bloating, constipation, or diarrhoea.

There's no cure for IBS. But there are treatments that can help you control your symptoms. There are also things you can do to help yourself. To find out more see [Self-help for IBS symptoms](#).

Talking to your doctor about your worries is important. A good relationship with your doctor can help you to find the best treatment for your symptoms.

### Key messages for people with irritable bowel syndrome

- Anti-spasmodic drugs may help to relieve pain.
- Antidepressants may reduce pain and diarrhoea for some people if other treatments haven't worked.
- A fibre supplement could relieve constipation.
- Most medicines work only a little better than a dummy treatment (a placebo).
- There are things you can do for yourself that might help if you have IBS, such as learning to deal with stress.
- Talking treatments like cognitive behaviour therapy and hypnotherapy may help.
- Learning as much as you can about IBS will help you cope better.

Which treatments work best? We've looked at the best research and given a rating for each treatment according to how well it works.

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For help deciding which treatment is best for you, see [How to use research to support your treatment decisions](#).

## Treatment Group 1

### Treatments for irritable bowel syndrome

#### Treatments that are likely to work

- [Anti-spasmodic drugs](#) : These drugs relax the muscles in the wall of your bowels to stop painful spasms. They include (with their brand names) mebeverine (Colofac IBS), alverine (Spasmonal), hyoscine (Buscopan), and dicycloverine (Merbentyl). [More...](#)
- [Antidepressants](#) : Drugs used to treat depression also seem to have benefits for people with IBS. Doctors often prescribe a type of drug called a tricyclic antidepressant. Examples (with brand names) are amitriptyline, clomipramine (Anafranil), doxepin (Sinequan), and trimipramine (Surmontil). [More...](#)
- [Fibre supplements](#) : These supplements can be used to treat constipation and possibly some of the other symptoms of IBS. Examples of fibre supplements (with brand names) include ispaghula (Fybogel, Isogel), methylcellulose (Celevac), and sterculia (Normacol). [More...](#)
- [Peppermint oil](#) : Peppermint oil relaxes the muscles in your bowels. It's sometimes used to treat symptoms of IBS. [More...](#)

#### Treatments that work, but whose harms may outweigh benefits

- [Alosetron](#) : This drug is used to treat women with diarrhoea and pain caused by severe IBS. It's not available in the UK, but we've included information on it for people who are interested. The brand name in the US is Lotronex. There's a risk of serious side effects. [More...](#)

#### Treatments that need further study

- [Loperamide \(Imodium\)](#) : This drug is sometimes used to treat diarrhoea in people with irritable bowel syndrome. [More...](#)
- [Cognitive behaviour therapy](#) : This is a talking treatment. It teaches you how to deal with stressful thoughts and feelings. The idea is that this will help you control your symptoms of IBS. [More...](#)
- [Hypnotherapy](#) : Hypnotherapy helps you relax and focus on your symptoms. Some types of hypnotherapy use tapes or CDs so you can continue treatment at home. [More...](#)

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- [Acupuncture](#) : If you have this treatment, a trained acupuncturist puts thin needles into your skin. [More...](#)
- [Probiotics](#) : These are tiny organisms, usually bacteria, that are similar to those that live in your bowels and help digestion. [More...](#)

### What will happen to me?

Lots of people with irritable bowel syndrome (IBS) worry that they have something serious, like cancer. But IBS doesn't lead to serious illnesses.

Irritable bowel syndrome:

- Won't make your life shorter. People with IBS live just as long as other people<sup>[25]</sup>
- Doesn't lead to a more serious disease, such as inflammatory bowel disease, coeliac disease or bowel cancer. To read more, see [Other problems in the bowels](#) .
- Doesn't cause permanent damage to your bowels, or cause bleeding.

How badly you are affected by IBS depends on how it affects your enjoyment of life, rather than your symptoms.<sup>[26]</sup> But your symptoms probably won't go away. In a study that looked at how people's symptoms changed after an average of two years:<sup>[27]</sup>

- Up to 2 in 10 people had symptoms that got worse
- Between 3 in 10 and 5 in 10 people had symptoms that didn't change
- The remainder had symptoms that improved or disappeared.

There are things you can do to help yourself if you have IBS. To read more, see [Self-help](#) .

### How IBS can affect your life

If you have bad IBS, it can affect how much enjoyment you get out of life. It may make you feel depressed or anxious.<sup>[27]</sup> It may also affect your relationships and work.<sup>[28]</sup> If this is happening to you, you are not alone. One study of people with IBS found that:

- Almost 5 in 10 said IBS interfered with their sex life
- Almost 5 in 10 had to take time off work because of their IBS
- Almost 5 in 10 suffered embarrassment using toilets at work
- About 3 in 10 stopped applying for promotions or new jobs

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- About 1 in 10 had to give up work altogether.

If you are depressed, there are treatments that can help. To read more, see [Feeling depressed](#).

### Other health problems

If you have IBS, you're more likely to go to see your doctor about other health problems. <sup>[26]</sup> These include:

- **Migraines**
- **Asthma**
- **Depression**.

But doctors don't know why this is.

If you have IBS, you're more likely to have an operation to:

- Remove your gall bladder. <sup>[22]</sup> Your gall bladder is a small sac under your **liver** that stores bile. Your body needs bile to help break down fat and carry away waste products
- Remove your womb (a hysterectomy). <sup>[29]</sup> About 1 in 5 women with IBS have had a hysterectomy.

But we don't know if the increased chance of surgery if you have IBS is due to: <sup>[22]</sup> <sup>[29]</sup>

- The wrong diagnosis. The symptoms of IBS may be confused with symptoms from other parts of your body. This may lead to unnecessary operations
- The same underlying problem producing symptoms in your bowels, gall bladder, and womb
- Symptoms of IBS happening because of an operation to remove your gall bladder or womb.

### It's important to talk to your doctor

There are things you can do to control IBS and stop it affecting your life too much. A good relationship with your doctor can really help. <sup>[25]</sup> You need someone who is able to give you time to discuss your worries. That way you're more likely to find ways to cope.

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It also helps if you learn about IBS. This will help you feel more in control. <sup>[30]</sup> You may find that getting in touch with a support group helps. <sup>[31]</sup> Your doctor will probably be able to recommend a support group in your area.

### Questions to ask your doctor

If you have irritable bowel syndrome, you may want to talk to your doctor to find out more.

Here are some questions that you might want to ask:

- How do you know I have irritable bowel syndrome?
- Could it be a more serious illness?
- Do I need any tests?
- Do you know what's causing it?
- What treatment do I need?
- What should I do if treatment doesn't work?
- What medicine can I take to help with pain, diarrhoea or constipation?
- What can I do myself to help control my symptoms?
- Do I need to change my diet?
- Does stress make my irritable bowel syndrome worse?
- What can I do to reduce stress?
- Are there any alternative or complementary treatments?

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## Treatments:

### Anti-spasmodic drugs

In this section

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[How can they help?](#)

[How do they work?](#)

[Can they be harmful?](#)

[How good is the research on anti-spasmodic drugs?](#)

## Irritable bowel syndrome

This information is for people who have irritable bowel syndrome. It tells you about anti-spasmodic drugs, treatments used for irritable bowel syndrome. It is based on the best and most up-to-date research.

### Do they work?

Probably. Anti-spasmodic drugs can help some people with the pain and other symptoms caused by irritable bowel syndrome (IBS).

### What are they?

Anti-spasmodic drugs relax the wall of your bowels. They include (with brand names):

- alverine (Spasmonal)
- dicycloverine (Merbentyl)
- hyoscine (Buscopan)
- mebeverine (Colofac).

You can get these drugs on prescription from your doctor. You can also buy several of them yourself from a pharmacy. Brands you can buy yourself include Colofac IBS and Buscopan IBS.

You can also get some of these medicines combined with a fibre supplement. You can get mebeverine as Fybogel mebeverine. It comes in a sachet which you mix with water.

[Peppermint oil](#) , a herbal treatment from the peppermint plant, also has an anti-spasmodic effect.

Anti-spasmodic drugs all work in slightly different ways. If one doesn't work well for you, it might be worth trying a different one. People often take anti-spasmodic drugs for a week or so at a time to control symptoms when they flare up. It's better to take these tablets when your symptoms get bad than to take them every day.

### How can they help?

Anti-spasmodic drugs can help with irritable bowel syndrome, especially if your main symptom is pain.<sup>[50]</sup> You may also find that some of your other symptoms improve too.

One summary of the research found that about 6 in 10 people improved if they took anti-spasmodic drugs, compared with 4 in 10 people who took a placebo.<sup>[51]</sup> However, the better quality studies were less likely to find a benefit, which makes it harder to trust the results.



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A second summary of research found that most of the anti-spasmodic drugs it looked at were better than a placebo at reducing symptoms, but - as with the previous summary - better quality studies were less likely to find a benefit. <sup>[52]</sup>

### How do they work?

The muscles in the wall of your bowels can be overactive if you have irritable bowel syndrome. You may get spasms that cause pain and discomfort. Spasms are sudden, strong muscle contractions. Wind or stools may get trapped in your bowels. This can make you feel bloated.

Anti-spasmodic drugs work by relaxing the muscles of your bowels. This stops you having spasms. So you should feel less pain and be less bloated.

### Can they be harmful?

In studies, the number of people who got side effects from alverine, mebeverine, or hyoscine was about the same as the number of those who got side effects from taking a dummy treatment (a placebo). <sup>[53]</sup>

Some people taking alverine say they get side effects like sickness, headaches, itching, rashes and dizziness. <sup>[54]</sup> Mebeverine can cause an allergic reaction, but this is rare.

Dicycloverine and hyoscine may have more side effects. Some side effects of these drugs include: <sup>[54]</sup>

- Constipation
- A dry mouth
- Feeling sick
- Blurred vision
- Drowsiness
- Problems with your heartbeat, such as palpitations
- Difficulty urinating or an urgent need to go
- Dryness in your airways
- Sensitivity to light
- Flushing and dry skin.

But we don't know how likely these side effects are.

### How good is the research on anti-spasmodic drugs?

We found several big summaries of the research (known as [systematic reviews](#) ).

A first review found that about 6 in 10 people improved if they took anti-spasmodic drugs, compared with 4 in 10 people who took a [placebo](#) .<sup>[51]</sup> However, the better quality studies were less likely to find a benefit, which makes it harder to trust the results

A second review found that most of the anti-spasmodic drugs it looked at were better than a placebo at reducing symptoms, but - as in the previous review - better quality studies were less likely to find a benefit.<sup>[52]</sup>

Another study compared mebeverine, an anti-spasmodic drug, with [alosecron](#) , a type of drug called a 5-HT receptor antagonist.<sup>[55]</sup> The study included 623 people, most of them women. Alosetron worked better than mebeverine. But alosetron has side effects, such as constipation and a risk of getting ischaemic colitis. This is a serious condition where blood flow to your bowels is reduced. Alosetron isn't available in the UK.

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## Antidepressants

In this section

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[What are they?](#)

[How can they help?](#)

[How do they work?](#)

[Can they be harmful?](#)

[How good is the research on antidepressants?](#)

This information is for people who have irritable bowel syndrome. It tells you about antidepressants, a treatment used for irritable bowel syndrome. It is based on the best and most up-to-date research.

### Do they work?

Yes. Antidepressants may help some people with irritable bowel syndrome (IBS).

### What are they?

Antidepressants are medicines that are normally used to treat depression. They affect chemicals called **neurotransmitters**, which help carry messages between brain cells. Doctors also use antidepressants to treat pain and diarrhoea caused by IBS. You might be given an antidepressant if other treatments haven't helped you.

Doctors prescribe antidepressants for IBS at a lower dose than for depression, so there may be fewer side effects.

Antidepressants usually take a while to start working, so you might not feel the benefits of treatment for two or three weeks.

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You need to take antidepressants every day, and not just when your symptoms flare up. So your doctor will probably prescribe antidepressants only if you have bad symptoms most of the time.

Most research in IBS has been on a group of antidepressants called tricyclics. Your doctor may suggest trying one of these drugs first. Tricyclic antidepressants (with their brand names) include:

- amitriptyline
- clomipramine (Anafranil)
- doxepin (Sinepin)
- imipramine
- mianserin
- nortriptyline (Allegron)
- trimipramine (Surmontil).

There hasn't been quite as much research on the antidepressants called selective serotonin reuptake inhibitors (SSRIs). SSRIs include:

- citalopram (Cipramil)
- fluoxetine (Prozac)
- fluvoxamine (Faverin)
- paroxetine (Seroxat)
- sertraline (Lustral).

### How can they help?

Antidepressants help some people with IBS. <sup>[51]</sup> <sup>[52]</sup> In studies, about 6 in 10 people found their symptoms of IBS improved when they took an antidepressant. This compared with about 4 in 10 people who improved after taking a dummy treatment (a placebo).

There's been more research on tricyclics. There are fewer studies on SSRIs. However, the research so far suggests that tricyclics and SSRIs work equally well for people with IBS. <sup>[51]</sup>

## How do they work?

Doctors aren't sure how antidepressants help people with IBS. Antidepressants help to relieve some kinds of nerve pain, so it's possible that they could also help with pain caused by IBS.

Another theory is that antidepressants work by treating underlying depression or anxiety. However, in several studies, the improvement in people's IBS wasn't connected to improvements in their mood. In one study, antidepressants worked best for people who weren't depressed. So, it might be that antidepressants work by helping with pain somehow, rather than by improving your mood.

## Can they be harmful?

All antidepressants can have side effects. In studies looking at people with IBS, about 2 in 10 people got some kind of side effect, but none of the problems were serious.<sup>[51]</sup> The most common side effects were drowsiness and dizziness.

Common problems with tricyclic antidepressants include a dry mouth, blurred vision, constipation, and sweating. SSRIs can cause an upset stomach, changes in your appetite, a dry mouth, or a rash.<sup>[56]</sup>

If you get these side effects or other problems, talk to your doctor. He or she might suggest a different drug or a change of dose.

When doctors prescribe antidepressants for IBS, they usually suggest a lower dose than the one used for treating depression. This might mean you're less likely to get side effects. The side effects of SSRIs are less likely to bother people than the side effects of tricyclics.<sup>[56]</sup>

## Self-harm and suicide

Research has found that children, teenagers and young adults taking antidepressants of all kinds are more likely to think about suicide or try to harm themselves.<sup>[57]</sup>

The risk of suicidal thoughts is highest if you're under 18.<sup>[57]</sup> In studies of people under 18 taking an antidepressant, an extra 14 in 1,000 thought about suicide.

The researchers also found that there's a risk for young adults up to the age of 24.<sup>[57]</sup> But their risk wasn't as big as the risk for people under 18. An extra 5 in 1,000 people between the ages of 18 and 24 thought about suicide. The research doesn't seem to show an increased risk of suicidal thoughts or self-harm for people over the age of 24.<sup>[57]</sup>

Doctors are advised to keep a careful check on anyone taking antidepressants for signs of suicidal thoughts. You are more likely to get these thoughts in the early stages of your

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treatment, or if the dose of the antidepressant you're taking is changed. You may also be at risk if you have had thoughts about harming or killing yourself before. <sup>[58]</sup>

Whatever your age, if you're taking an antidepressant and are worried about any thoughts or feelings you have, **see your doctor or go to a hospital straight away**. You might also find it helpful to tell a relative or close friend about your condition. You could ask them to tell you if they notice changes in your behaviour. <sup>[58]</sup>

### How good is the research on antidepressants?

Individual studies on antidepressants for irritable bowel syndrome (IBS) have had mixed results. Overall, looking at all the trials together, it seems that these drugs do work. <sup>[51]</sup>  
<sup>[52]</sup>

A large review of the research looked at 13 studies that compared antidepressants with a placebo. Altogether, the studies included 789 people.

About 6 in 10 people found their symptoms of IBS improved when they took an antidepressant. This compared with about 4 in 10 people who improved after taking a placebo.

Most of the studies looked at older antidepressants, called tricyclics. There's not as much research on newer antidepressants, called serotonin reuptake inhibitors (SSRIs). However, from the studies that have been done so far, the two types of drug seem to work about as well as each other.

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## Fibre supplements

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[How good is the research on fibre supplements?](#)

This information is for people who have irritable bowel syndrome. It tells you about fibre supplements, a treatment used for irritable bowel syndrome. It is based on the best and most up-to-date research.

### Do they work?

Fibre supplements are likely to help with constipation. Types that swell up in water, like ispaghula husk, may also help with the other symptoms of irritable bowel syndrome (IBS). Some types of fibre may worsen pain for some people.

### What are they?

Fibre (or roughage) is part of your food. It comes from plants, and can't be absorbed by your body. It travels straight through your bowels and forms the main part of your stools.

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You need some fibre in the food you eat to help keep food moving through your bowels properly. You also need fibre to help keep your bowels healthy. In the UK, the recommended amount of fibre for adults is 30 grams (1 ounce) a day.

If you have IBS, your doctor may advise you to make sure you have enough fibre in your diet, especially if you are constipated.

You can normally get the fibre you need from foods like whole-grain cereals (such as oats, barley, and wheat), wholemeal bread and flour, brown rice, and fruit and vegetables.

But if you can't get enough fibre in your diet, and you have constipation, your doctor may advise you to take a fibre supplement. You can buy these at pharmacies or health food shops.

Fibre supplements are made from plant grains or seeds. They make your stools bigger and softer. This helps the muscles in your bowels move along the waste from your food.

One type of fibre supplement normally advised for people with IBS is called ispaghula husk. It absorbs water and swells up in your bowels. You can buy it in plain, lemon, and orange flavours. It comes as granules in a sachet that you drink with water. Some brand names are Fybogel, Isogel, and Ispagel. It's also available as a powder, brand name Regulan.

Similar fibre supplements are methylcellulose (brand name Celevac) and sterculia (Normacol). You can take these as tablets, powders, or granules. These types of fibre are sometimes called soluble fibre.

You need to drink plenty of water with these supplements to stop your bowels getting blocked and help the supplement work. You shouldn't take these kinds of fibre just before going to bed. <sup>[59]</sup>

**Bran** is another type of fibre supplement. Bran comes from the outer part of the grain when it is milled into flour and is often eaten sprinkled on breakfast cereal or mixed with fruit juice. But bran may not be advised if you have IBS. It might help with constipation, but research suggests that bran won't help with other symptoms of IBS. <sup>[60]</sup> <sup>[51]</sup> Bran is sometimes called insoluble fibre.

### How can they help?

Here's what the research shows about fibre supplements. <sup>[60]</sup> <sup>[51]</sup> <sup>[61]</sup> <sup>[52]</sup>

- Taking a fibre supplement of any kind may relieve constipation caused by IBS.
- Taking a laxative that swells up in water, like ispaghula, may improve symptoms of IBS overall, but it's not clear whether this treatment helps with pain.

About 5 or 6 out of 10 people find their IBS improves with fibre, which is only slightly better than the improvement seen with a dummy treatment (a placebo). <sup>[51]</sup> Also, better

## Irritable bowel syndrome

quality studies have been less likely to find an improvement with fibre, which makes it hard to be sure of the benefits.

### How do they work?

Eating more fibre can help stop constipation. Some forms of fibre keep water in your stools. This makes your stools bigger and softer, so the muscles in your bowels can move waste along better. Food waste moves through your bowels faster, and you don't get hard stools that make going to the toilet difficult.

### Can they be harmful?

Fibre supplements don't seem to help with pain, and some studies suggest that this treatment could even make pain worse for some people with IBS.<sup>[60]</sup> One theory is that fibre reacts in the bowel to make gas, which could cause pain and bloating. However, other research suggests that not many people get side effects from fibre, so it's hard to say for sure.

You need to drink plenty of water if you take a fibre supplement, or your bowels might get blocked.<sup>[59]</sup>

In one study, people were more likely to stop taking a bran supplement, than a supplement of psyllium, a type of soluble fibre. People stopped taking the bran supplement because their symptoms worsened.<sup>[61]</sup>

### How good is the research on fibre supplements?

The research isn't very clear about whether fibre helps people with irritable bowel syndrome (IBS). Different studies have had different results, especially when it comes to the effect of fibre on pain.<sup>[60]</sup> <sup>[51]</sup> <sup>[52]</sup>

The most positive research is about the types of fibre that dissolve in water, like psyllium.<sup>[60]</sup> <sup>[51]</sup> <sup>[61]</sup>

One review of the research found that IBS improved for about 5 or 6 out of 10 people who took fibre.<sup>[51]</sup> However, this was only slightly better than the improvement seen with a dummy treatment (a placebo).

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## Alosetron

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## Irritable bowel syndrome

This information is for people who have irritable bowel syndrome. It tells you about alosetron, a treatment used for irritable bowel syndrome. It is based on the best and most up-to-date research.

### Does it work?

Alosetron may help some women with bad diarrhoea caused by irritable bowel syndrome (IBS). We don't know if it works for men. And alosetron may make you constipated. Its use is restricted in some countries because there's a risk of serious bowel disease.

Alosetron isn't available in the UK. But we've included information on it, for UK patients who are interested.

### What is it?

Alosetron is a type of drug called a 5-HT<sub>3</sub> antagonist. It slows down the muscle contractions of your bowels. It's not available in the UK. In the US, its brand name is Lotronex.

It's approved for use in the US for women with very bad diarrhoea from IBS. But doctors prescribe it only if other treatments haven't worked, because there's a risk of serious side effects.

### How can it help?

In studies, about half the women with diarrhoea caused by IBS were helped by alosetron.<sup>[62]</sup> But the benefits went away when they stopped taking the drug.<sup>[55]</sup>

One study found that alosetron works better than the [anti-spasmodic drug](#) mebeverine.<sup>[55]</sup>

There's no evidence that alosetron helps men with IBS.

### How does it work?

Alosetron affects a chemical messenger called **serotonin**. One of serotonin's jobs is controlling the nerves that tell your bowel muscles what to do. It affects your nerve cells by attaching to them. The parts of cells that it sticks to are called serotonin receptors.

The actions of serotonin can cause pain and diarrhoea if you have IBS. Alosetron blocks a type of serotonin receptor called the 5-HT<sub>3</sub> receptor. This reduces the effects of serotonin and makes the muscle contractions in your bowels slow down. You should have less pain and diarrhoea.

But the actions of serotonin may be different in men and women.<sup>[14]</sup> So alosetron is unlikely to work in the same way for men.



### Can it be harmful?

Alosetron can be harmful.

- Between 1 in 350 and 1 in 1,000 people who take alosetron get a serious condition called **ischaemic colitis**.<sup>[63]</sup> This condition can happen when your bowels don't get enough blood. It can cause serious damage to your bowels, and you may need surgery. It can kill, but this is rare. Signs of ischaemic colitis include new or worsening pain in the abdomen, fever, bloody diarrhoea, bleeding from your **rectum** and lower back pain.
- About 1 in 4 people get constipated while taking alosetron.<sup>[55]</sup> And about 1 in 1,000 women get serious problems with constipation. These can be so bad you need to go to hospital. It's even possible you could die.<sup>[63]</sup>

The use of alosetron is restricted in some countries because of these risks.

In the US, the Food and Drug Administration (FDA), which checks the safety of drugs, has warned that alosetron has serious risks.<sup>[63]</sup> It can only be prescribed in the US for people with very bad diarrhoea from irritable bowel syndrome. And it's used only if other treatments haven't worked.

### How good is the research on alosetron?

There's good research showing that alosetron improves symptoms of diarrhoea in some women. But there isn't enough evidence to say if the drug helps men with irritable bowel syndrome (IBS).

We found two summaries of the research ( **systematic reviews** ).<sup>[55]</sup> <sup>[62]</sup> Both reviews looked at the same five studies involving 2,675 people. Most of the people in the studies were women.

The reviews found that alosetron helped about half the women who took it. But their symptoms came back when they stopped treatment.

One study compared alosetron with mebeverine (an **anti-spasmodic drug** ).<sup>[55]</sup> The study included 623 people, most of them women. Alosetron worked better than mebeverine after 12 weeks of treatment.

Almost 95 in 100 people taking part in the studies were women. So we need more research to tell us whether alosetron can help men with IBS.

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## Loperamide

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[How good is the research on loperamide?](#)

This information is for people who have irritable bowel syndrome. It tells you about loperamide, a treatment used for irritable bowel syndrome. It is based on the best and most up-to-date research.

## Does it work?

We're not sure. This drug may help with diarrhoea, but we need more research to know if it helps other symptoms of irritable bowel syndrome (IBS).

## What is it?

Loperamide is often used as treatment when diarrhoea is the main symptom of IBS. People sometimes take loperamide for a short time to relieve pain and reduce diarrhoea if their symptoms flare up.

Your doctor can prescribe loperamide, or you can buy anti-diarrhoea medicine containing loperamide in a pharmacy. One brand is Imodium, but you can probably find cheaper own-brand versions.

## How can it help?

Taking loperamide may help to make your stools more solid and reduce the number of times you need to go to the toilet.<sup>[62]</sup> It may also make your need for the toilet less urgent.

## How does it work?

Loperamide is a type of anti-diarrhoea drug that works by stopping your bowels going into spasm. This should reduce your need for the toilet and the feeling that you have to go urgently.

## Can it be harmful?

People who took loperamide were likely to have more pain in their abdomen at night.<sup>[64]</sup> But this pain was less if the dose was split and taken twice a day.

You might get some side effects if you take loperamide, such as:<sup>[65]</sup>

- Stomach cramps
- Dizziness
- Drowsiness
- Bloating
- Itchy skin (urticaria)

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- Air trapped in your bowels.

### How good is the research on loperamide?

We found one summary of the research ( [systematic review](#) ) that looked at five studies in people with IBS. <sup>[62]</sup> Overall, it found that loperamide can help with diarrhoea and the feeling of urgently needing the toilet. But the studies were poor-quality. Some were small, and most were done more than 10 years ago.

We need more research on loperamide to know how helpful it is for people with IBS.

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## Cognitive behaviour therapy

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[How good is the research on cognitive behaviour therapy?](#)

This information is for people who have irritable bowel syndrome. It tells you about cognitive behaviour therapy, a treatment used for irritable bowel syndrome. It is based on the best and most up-to-date research.

### Does it work?

It's hard to say whether [cognitive behaviour therapy](#) will help you if you have irritable bowel syndrome (IBS). Different studies say different things. Therapy may help some people, but we don't know how long the benefit lasts.

### What is it?

Cognitive behaviour therapy (CBT) is a talking treatment. It's used to treat lots of conditions, including [depression](#) and anxiety. If you have this treatment, you'll work with a therapist to look at and change the way you feel, think and behave.

You may do practical exercises, like relaxation training or deep breathing. And you may talk about how things like stress affect your IBS.

### How can it help?

CBT may help you if you have IBS. However a lot of the research on this treatment wasn't done very well. <sup>[66]</sup>

A review of several studies found that about 6 in 10 people improved with CBT, compared with about 4 in 10 people who didn't have therapy. <sup>[51]</sup> However, there are problems with the research suggesting that we may not be able to rely on these results.

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Some of the better-quality studies have found that CBT does help people with IBS. <sup>[67]</sup>  
<sup>[68]</sup> <sup>[69]</sup> <sup>[70]</sup> <sup>[71]</sup> <sup>[72]</sup> <sup>[73]</sup> Therapy may help reduce people's symptoms, or help people be less bothered by their symptoms and enjoy life more. Most of these studies found that CBT is better than a dummy treatment (a [placebo](#)).

When people do benefit from CBT, it's not clear how long the advantages last. Some research suggests that any benefits of treatment fade over time. <sup>[66]</sup>

### How does it work?

Using CBT for irritable bowel syndrome is based on the idea that IBS is related to the way you think. This doesn't mean that IBS is just in your mind. But the physical symptoms of IBS may be connected to your thoughts and emotions. For example, your IBS may get worse when you're under stress.

CBT is a practical type of therapy that teaches you ways of dealing with unhelpful thoughts and feelings. You may learn to be more relaxed, or learn techniques to help you deal with stress. The idea is that this will give you more control over your symptoms.

### Can it be harmful?

None of the research on therapy for IBS mentioned any side effects, but it is unlikely to be harmful.

### How good is the research on cognitive behaviour therapy?

There's some research looking at [cognitive behaviour therapy](#) for irritable bowel syndrome. But lots of the studies aren't very good. <sup>[51]</sup> <sup>[66]</sup> So, it's hard to say overall whether this therapy can help with irritable bowel syndrome.

One review of the research found that about 6 in 10 people improved with CBT, compared with about 4 in 10 people who didn't have therapy. <sup>[51]</sup> However, the individual studies in the review were often poor quality, so it's not clear if we can trust the results. There's also research suggesting that the benefits of CBT might wear off with time. <sup>[66]</sup>

However, there are some good-quality studies that found CBT is better than a dummy treatment ([placebo](#)) for treating symptoms and for helping people to enjoy life more and be less bothered by their symptoms. <sup>[67]</sup> <sup>[68]</sup> <sup>[69]</sup> <sup>[70]</sup> <sup>[71]</sup> <sup>[72]</sup> <sup>[73]</sup>

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## Hypnotherapy

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# Irritable bowel syndrome

This information is for people who have irritable bowel syndrome. It tells you about hypnotherapy, a treatment used for irritable bowel syndrome. It is based on the best and most up-to-date research.

## Does it work?

We're not sure. The research on hypnotherapy for people with irritable bowel syndrome (IBS) isn't very good. So we can't say whether it works or not.

## What is it?

If you have hypnotherapy, a hypnotherapist helps you to focus your attention at the same time as making you feel more relaxed. He or she then focuses on your symptoms, why you might have them and what you can do about them. The idea is that you'll be able to control symptoms on your own by making use of what you have learned under hypnosis.

You need to make sure you go to a qualified professional if you want to try this treatment. How much hypnotherapy helps may depend on how good the therapist is. <sup>[7]</sup>

Hypnotherapy for IBS might include several weekly sessions with a therapist. The sessions will probably last for half-an-hour to an hour. In some of the research, people also used tapes or CDs at home as part of their treatment.

Hypnotherapy takes up a lot of time and can be expensive. <sup>[7]</sup> But some doctors think it might be worth trying if your symptoms are bad and other treatments haven't worked. <sup>[7]</sup>

## How can it help?

We don't know whether hypnotherapy can help. Most of the studies weren't done very well, or didn't look at very many people. <sup>[74]</sup> This makes it hard to know if the results are reliable.

One small study of 90 people with IBS found that people who had hypnotherapy as well as medical treatments had less severe symptoms after 15 months than people who had medical treatment on its own. <sup>[75]</sup> One review of studies of whether hypnotherapy helps children with IBS found it did seem to help IBS symptoms, but the studies were very small and so it wasn't possible to say how much hypnotherapy might help. <sup>[76]</sup>

## How does it work?

Feeling stressed makes IBS worse for some people. Hypnotherapy aims to help people relax and worry less about their symptoms. This could help them get on with their lives or even have fewer symptoms. But the research isn't good enough to say whether hypnotherapy helps in this way or not.

## Can it be harmful?

Hypnotherapy is likely to be safe. People in the studies didn't report any serious side effects. <sup>[74]</sup>

## How good is the research on hypnotherapy?

The research on hypnotherapy for irritable bowel syndrome (IBS) isn't very good. There are only a few studies, and most of them weren't done very well or didn't look at many people. <sup>[74]</sup> <sup>[77]</sup> We found one study that collected together the findings from three small clinical trials (a systematic review). <sup>[78]</sup> The poor quality of the trials, and the small number of people on which hypnotherapy has been tested means we can't say whether hypnotherapy helps people with IBS or not.

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## Acupuncture

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[How good is the research on acupuncture?](#)

This information is for people who have irritable bowel syndrome. It tells you about acupuncture, a treatment used for irritable bowel syndrome. It is based on the best and most up-to-date research.

## Does it work?

We don't know. Some people try acupuncture to help with the pain and other symptoms of irritable bowel syndrome (IBS). But there hasn't been much good research to say whether it works or not.

## What is it?

Acupuncture is a traditional Chinese treatment. It's a type of complementary or alternative medicine. If you have acupuncture, a trained acupuncturist puts sterile needles into your skin.

Traditional acupuncturists believe that acupuncture improves the flow of energy around the body. Some modern doctors think that putting needles in the skin causes the release of natural chemicals in the body that block pain and make you feel relaxed. <sup>[79]</sup> Another theory is that acupuncture might work a bit like talking therapy. Discussing your situation with an acupuncturist and relaxing while the needles are put in might reduce anxiety, or help you cope better with IBS.

## How can it help?

A large review of the research has looked at several studies on acupuncture.<sup>[80]</sup> The results are mixed. Some good-quality studies found that acupuncture didn't work for IBS, although a few smaller, poorer quality studies had positive results. So, there doesn't seem to be much evidence in favour of acupuncture, although we need more research to know for certain.

A recent study of 230 people with IBS found that acupuncture worked better than no treatment, but just the same as sham acupuncture.<sup>[81]</sup> Sham acupuncture involves putting needles just a tiny distance into the skin, or into areas that aren't traditional acupuncture points. Since real acupuncture was no better than sham treatment, it might be that some of the benefit came from the placebo effect.

## How does it work?

It's not clear how acupuncture might work. One theory is that it stimulates the release of natural chemicals in the body that block pain. These chemicals are called endorphins and enkephalins.

## Can it be harmful?

Acupuncture is usually a safe treatment, although it is possible to get an infection where the needle is inserted. If you see a qualified acupuncture therapist who uses properly sterilised needles, you are unlikely to have problems.

## How good is the research on acupuncture?

A large review of all the research found no evidence that acupuncture can help with irritable bowel syndrome (IBS).<sup>[80]</sup> However, there have been individual positive and negative studies, so it's difficult to know for certain.<sup>[82]</sup>

One study found that traditional acupuncture was no better than sham acupuncture.<sup>[81]</sup> In sham acupuncture, needles are only put a short distance into the skin, or they're put in places that aren't traditional acupuncture points. Since sham treatment seems just as effective, it suggests that some of the benefits of acupuncture might come from the placebo effect. Both real and sham acupuncture worked better than having no treatment at all.

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## Peppermint oil

In this section

This information is for people who have irritable bowel syndrome. It tells you about peppermint oil, a treatment used for irritable bowel syndrome.

## Irritable bowel syndrome

We haven't looked at the research on this treatment in as much detail as we have for other treatments on our site (see Our method for more information). But we've included some information because you may have heard of this treatment or be interested in it.

Peppermint oil relaxes the muscles in your bowels.<sup>[45]</sup> <sup>[83]</sup> It may improve symptoms of IBS, including pain and bloating.

You can get peppermint oil capsules on prescription from your doctor. You can also buy peppermint oil yourself in a pharmacy as Colpermin capsules or Mintec capsules.

You should swallow the capsules whole with water. You shouldn't break or chew them because they can irritate your mouth.

Although peppermint oil is often used to treat IBS, there's not a lot of research to show whether it works. We found several summaries of the research on peppermint oil.<sup>[45]</sup> <sup>[83]</sup> They found that peppermint oil was better at reducing symptoms than a dummy treatment (a placebo).

A recent review combined several studies looking at nearly 400 people with IBS.<sup>[84]</sup> About 74 in 100 people improved with peppermint oil, compared with 35 in 100 people who took a placebo.

There may be side effects from peppermint oil. In some of the studies, around 2 in 10 people got at least one side effect.<sup>[83]</sup> These included:

- Heartburn
- A burning sensation around the anus
- Blurred vision
- Feeling sick.

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## Probiotics

In this section

This information is for people who have irritable bowel syndrome. It tells you about probiotics, a treatment used for irritable bowel syndrome.

We haven't looked at the research on this treatment in as much detail as we have for the other treatments on our site. To find out more, see Our method. But we've included some information on probiotics because you may be interested in them.

Everyone has bacteria in their gut. Some bacteria help to digest food and kill harmful bacteria. It's possible that the symptoms of irritable bowel syndrome (IBS) happen, at least in part, because people don't have enough helpful bacteria in their bowels.



## Irritable bowel syndrome

Probiotic products contain live bacteria. You can get probiotic yoghurts, milk, soya drinks, and other foods. You can also buy supplements, which come as tablets or capsules. The aim is to top up the helpful bacteria in your bowels.

You might hear probiotics called 'friendly bacteria'.

The research on using probiotics to treat IBS is still at an early stage. One review of the research (a [systematic review](#)) looked at 19 studies (randomised controlled trials) comparing probiotics with a dummy treatment (a [placebo](#)).<sup>[85]</sup> Overall, probiotics seemed to work better than a placebo. However, the results varied widely between trials, which makes it harder to rely on them.

In a study looking just at children who got stomach pain, children who took probiotics had less stomach pain, and their pain was less bad.<sup>[86]</sup>

These results are promising, but we need more research to know for sure how much probiotics can help. Studies also need to explore how probiotics compare with other treatments for IBS and which probiotics might be best to use.

If you decide to try probiotics, it's best to use them for at least four weeks to see whether they help.<sup>[37]</sup>

Since probiotics are similar to bacteria that live in your bowels, they are unlikely to cause harm. But it's a good idea to check with your doctor before trying this treatment, especially if you have other health problems. Also, bear in mind that probiotics aren't checked for quality and safety in the same way that medicines are.

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### Further informations:

#### Your brain and your bowels

People who have irritable bowel syndrome (IBS) are more likely to feel anxious and stressed.<sup>[12]</sup> <sup>[7]</sup> But this doesn't mean that IBS is 'all in the mind'. Your pain and other symptoms are real. However, experts think changes in the way messages are sent between your brain and your bowels could be the reason for IBS.

We don't fully understand the connection between your brain and your bowels, but this is what research has found.

- People with IBS are more sensitive to pain in their bowels.<sup>[9]</sup>
- In people with IBS, the part of the brain that controls pain is more active than normal.<sup>[10]</sup>

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- Muscles controlling your bowels may not work properly if you have IBS. <sup>[4]</sup> <sup>[2]</sup> <sup>[3]</sup> Nerves carry messages between your brain and the muscles in your bowels. If you have IBS, the messages may be disturbed.
- Stress makes food pass through your bowels more quickly. <sup>[7]</sup> Your bowels are controlled automatically by nerves. These nerves can react to stress. This is why people get stomach cramps or 'butterflies' when they are nervous or upset. But if you have IBS, your bowels can be sensitive to even slight anxiety or stress.

So there are physical reasons why changes in your mood or emotions can cause the symptoms of irritable bowel syndrome.

### Other problems in the bowels

Inflammatory bowel disease and coeliac disease are serious conditions that can have symptoms similar to irritable bowel syndrome.

#### Inflammatory bowel disease

Inflammatory bowel disease is a general name for diseases that cause inflammation in your bowels. Some of the symptoms are similar to irritable bowel syndrome, but inflammatory bowel disease is more serious. There are different types of inflammatory bowel disease. Here are the most common.

#### Crohn's disease

Crohn's disease can affect any part of your digestive system, from your mouth to your anus. But it usually affects the lower part of your small bowel. <sup>[32]</sup> Patches of the bowel become inflamed, which can be painful. You also get diarrhoea and fever, and you may lose weight.

Because it's inflamed, the wall of your bowel is thicker. This can lead to sores (ulcers). Your bowel may also bleed, which can cause anaemia. Anaemia makes you feel tired and weak.

You usually need several tests to diagnose Crohn's disease. These include blood tests, a stool test, an x-ray, and a colonoscopy (where doctors look inside your bowel using a camera on a flexible tube). You can have treatment with drugs or surgery to help control the disease, but there is no cure.

To read more, see our information on [Crohn's disease](#).

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### Ulcerative colitis

Ulcerative colitis causes inflammation and sores (ulcers) in your large bowel.<sup>[33]</sup> It usually affects your back passage ( rectum ) and the lower part of your colon . Sometimes it affects your whole colon.

The most common symptoms of ulcerative colitis are pain in your abdomen and diarrhoea with blood. You may also lose your appetite, lose weight, and feel tired. Ulcerative colitis may also cause problems in other parts of your body, such as rashes, liver damage, and eye inflammation.

You need several tests to diagnose ulcerative colitis, including blood tests, a stool test, and an x-ray. You may also have a colonoscopy or [sigmoidoscopy](#) , where doctors look inside your bowel using a tube with a camera on the end.

Most people with ulcerative colitis are treated with drugs, but surgery to remove your colon is the only cure.

### Coeliac disease

Coeliac disease damages the small bowel, so it can't absorb the nutrients you get from food.<sup>[34]</sup> <sup>[35]</sup> People who have coeliac disease have an unusual reaction to a protein called gluten, which is found in grains such as wheat and barley. When people with coeliac disease eat foods containing gluten, their immune system responds by damaging the small bowel.

About 1 in 100 people in the UK have coeliac disease.<sup>[35]</sup> It can give you pain in the abdomen, bloating, diarrhoea, weight loss, and a painful rash.

Doctors can give you a blood test to see if you have coeliac disease. But they need to do a biopsy (where they cut away a tiny piece of tissue from your small bowel) to be sure you have it.

If you have coeliac disease, you need to eat a gluten-free diet for the rest of your life.

### Sigmoidoscopy

Sigmoidoscopy allows your doctor to see inside your bowels.

A viewing tube called a **sigmoidoscope** is put into your rectum . The sigmoidoscope has a light which shines inside your bowel. There's a camera on the end of the sigmoidoscope, so the doctor can look at the inside of your bowel using a screen in the operating theatre.

The doctor may use a flexible sigmoidoscope, which allows him or her to look around bends in your colon and to go further up. It's also more comfortable for you.

## Irritable bowel syndrome

There is a risk that your colon could bleed or be punctured when you have a sigmoidoscopy.<sup>[36]</sup> But this is rare.

### Further tests to rule out other illnesses

To diagnose irritable bowel syndrome (IBS), your doctor will probably order blood tests to rule out other illnesses. You probably won't need other tests, unless your doctor isn't sure whether your symptoms are caused by IBS or something else. You may be referred to a hospital clinic to see a specialist (a gastroenterologist) for these other tests.

Other tests include:<sup>[37]</sup> <sup>[20]</sup> <sup>[38]</sup>

- A test to check you don't have an infection. You'll be asked to pass a stool, which is then sent to a laboratory
- A test to check for blood in your stool
- A test to check your stools for a protein called faecal calprotectin, which can be a sign that the bowels are inflamed
- A test to check your hormone levels. This is to see if your thyroid gland is working properly
- A breath test, to see if you're intolerant to something you've eaten, such as lactose. Lactose is found in dairy products like milk and cheese. Being intolerant means your body can't absorb the food properly. But only a small number of people find they're intolerant to something they've eaten
- An ultrasound scan to see inside your abdomen.

A specialist might also want to arrange tests to look at what's happening inside your bowels. You won't be asked to have these tests unless your doctor thinks your symptoms might be caused by a disease that isn't IBS. But remember: even if you are referred for these tests, this doesn't mean you have a more serious illness. It just means your doctor wants to check to be sure.

### Sigmoidoscopy

Sigmoidoscopy allows your doctor to see inside your bowel. A viewing tube called a **sigmoidoscope** is put into your rectum. The sigmoidoscope has a light that shines inside your bowel. There's a camera on the end of the sigmoidoscope, so the doctor can look at the inside of your bowel using a screen in the operating theatre.

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risk that your colon could bleed or be punctured when you have a sigmoidoscopy.<sup>[36]</sup> But this is rare.

Before you have a sigmoidoscopy, you'll need to clear your bowels. Many people do this by taking laxatives. You'll probably also be asked not to have any solid food for several hours before the test.

### Colonscopy

A colonoscopy lets your doctor see inside your colon and rectum. A colonoscope is a flexible tube that is put into your rectum. Before you have a colonoscopy, you may have a painkiller or a sedative to make you sleepy and relaxed. This will make the test more comfortable. You may not remember any of it when you are fully awake again.

For most people, the test is simple and safe.<sup>[39]</sup> But you'll need to clear your bowels before you have a colonoscopy. You might take a laxative, or be asked to avoid solid food for a few days before the test. Some people find this unpleasant or inconvenient.

Things don't often go wrong during a colonoscopy. But there's a small chance the colonoscope could poke a hole in the wall of your bowels. This is called a perforation. The chances of it happening are about 1 in 1,000.<sup>[39]</sup>

We've prepared some extra information for people thinking of having this test. To read more, see Colonoscopy.

### Barium enema

A barium enema is used to help take an x-ray of your bowels. A thick, white liquid that contains a chemical called barium is passed up a tube into your back passage. The barium sticks to the lining of your bowels, and helps make the x-ray images clearer. A series of pictures will be taken as the barium liquid passes back down your bowels.

Your stools may be white for a few days after a barium enema. This is the barium liquid leaving your body. It's nothing to worry about.

This test is very safe.<sup>[40]</sup> But some people get cramps in their abdomen, and there's a very small risk that part of the wall of your bowels could tear.

## Self-help for IBS symptoms

This information is for people who have irritable bowel syndrome. It tells you about some of the things you can do yourself, if you have irritable bowel syndrome.

You can take steps to control your symptoms of irritable bowel syndrome (IBS). Up to three-quarters of people with IBS rely on self-care instead of going to the doctor.<sup>[20]</sup>

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We haven't looked at the research on many of these treatments in as much detail as we have for other treatments (see Our method), so we can't be sure that they work. But they may be worth trying.

### Dealing with stress

If you have IBS then feeling tense, troubled, or angry can affect muscles in your bowels.

<sup>[7]</sup> Lots of people get stomach cramps or 'butterflies' when they are nervous or upset. But if you have IBS, your bowels can be extra sensitive to even slight anxiety or stress.

Stress can also make you worry more about sensations from your bowels. For more information on how stress affects your bowels, see [Your brain and your bowels](#) .

Keeping a diary of your symptoms may help you recognise the things that make you feel stressed and bring on your symptoms. <sup>[41]</sup>

You could include:

- The date and time
- The symptoms and how bad they are
- Anything in your life which might be making you feel stressed
- Your emotions (for example, you may feel angry or anxious)
- Your thoughts (for example, you may think you can't do anything about what's happening)

This diary may help you recognise the triggers that bring on your symptoms. When you come across the same triggers in future you can use techniques for dealing with stress.

Learning to deal with stress is an important part of treatment for irritable bowel syndrome. Talking treatments, such as [cognitive behaviour therapy](#) and [hypnotherapy](#) , may help if anxiety is making your bowel symptoms worse. And there are other techniques you can try to reduce your stress levels and symptoms of IBS like [relaxation](#) , [yoga](#) , and [meditation](#) .

### Changing your diet

Lots of people believe that something in their diet is responsible for their IBS. But there hasn't been any research showing that what you eat causes IBS.

A small number of people do have a food intolerance. This means their bowels don't react well to a particular food. Milk, wheat, and eggs are foods that people often say make IBS worse. <sup>[42]</sup>

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About 1 in 10 people with IBS have **lactose intolerance**.<sup>[7]</sup> Lactose intolerance means you can't easily digest dairy foods like milk and cheese. Unfortunately, not eating foods containing lactose doesn't often cure IBS.

Dairy products, bread, high-fat foods, and rich or spicy foods may trigger symptoms in some people. You could try not eating a particular food if you think it's giving you symptoms. You will need to do this for at least one month to see if it makes a difference.

<sup>[43]</sup> Avoiding particular foods can make your life difficult, and it's easy to miss out on important nutrients. If you're following a stricter diet (say, excluding a lot of foods at once) it's best to do this under the supervision of a **dietitian**. Diets that cut out some foods are more likely to work for people who have diarrhoea as their main symptom.<sup>[42]</sup>

Research shows that food containing gluten can worsen symptoms for some people with IBS. Adopting a gluten-free diet may be helpful for some people.<sup>[44]</sup>

Some people try to improve their symptoms by using **probiotics**. These are tiny organisms, usually **bacteria**, that are similar to those that live in your bowels and help digestion. They are found in foods such as probiotic yoghurt and drinks, and are also available in supplements. But there hasn't been enough research to say whether they work for IBS.<sup>[45]</sup>

There are some simple changes you can make to your diet that might help your symptoms. But do keep in mind that there's not much research on changing your diet.<sup>[46]</sup>

- Try eating small, regular meals and a balanced, healthy diet.<sup>[7]</sup> Don't skip meals and try to eat without rushing.<sup>[37]</sup>
- Some people may benefit from more fibre in their diet. But others benefit by eating less fibre.<sup>[7]</sup> Fibre comes from plants. Your body can't digest it, so it passes straight through your digestive system. Everyone needs some fibre for their bowels to work well and to avoid getting constipated. To read more, see [Fibre supplements](#).
- Cutting out foods and drinks that contain caffeine (such as tea, coffee, cola, and chocolate) and sugar substitutes (such as sorbitol and fructose) may help.<sup>[43]</sup>
- Try not to eat more than three portions of fruit each day.<sup>[37]</sup>
- If you have wind or feel bloated, eating oats (for example, in a cereal) or linseeds may help.<sup>[37]</sup>

### Over-the-counter medicines

You can buy medicines for irritable bowel syndrome over the counter in pharmacies. You can use them for treating symptoms when you need to. But it's probably best to discuss



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taking medicine with your doctor first. The treatments you can buy over the counter include:

- **Anti-diarrhoea medicine.** A drug called loperamide has a relaxing effect on bowel spasms and is often used to treat diarrhoea. People sometimes take a short course of loperamide to relieve pain and reduce diarrhoea if their symptoms flare up. Your doctor can prescribe loperamide, or you can buy medicine containing loperamide (such as Imodium) in a pharmacy. To read more, see [Loperamide](#) .
- **Laxatives.** You can take a fibre supplement as a laxative if you're constipated. Fibre is a plant material in food that your body can't digest, so it passes straight through your system. Everyone needs some fibre to keep their bowels healthy and to avoid getting constipated. You can buy a supplement containing ispaghula husk in pharmacies. It's called Fybogel. To read more, see [Fibre supplements](#) .
- **Peppermint oil.** Capsules of peppermint oil may improve symptoms of IBS, including pain and bloating. Taking the capsules may make you not need to go to the toilet as often. Peppermint oil seems to work by relaxing the muscles in your bowels. You can buy peppermint oil in a pharmacy. Brand names are Colpermin capsules and Mintec capsules. You can also get them on prescription. To read more, see [Peppermint oil](#) .
- **Anti-spasmodic drugs.** These medicines relax the wall of your bowels and may help relieve pain from IBS. They include mebeverine (brand name Colofac IBS), alverine (Spasmonal), and hyoscine (Buscopan). You can also get a prescription for these drugs from your doctor. To read more, see [Anti-spasmodic drugs](#) .

### Relaxation therapy for irritable bowel syndrome

Relaxation therapy teaches you to calm your mind by releasing the tension in your body and relaxing your muscles. The idea is that, once your muscles are relaxed, your mind relaxes too. Once you learn these techniques, you can relax whenever you feel stressed.

You can easily learn relaxation therapy from CDs. Or you can have sessions with a therapist. Most people need around 10 sessions.

If stress is making your irritable bowel syndrome (IBS) worse, learning to relax should help to reduce your symptoms. But there isn't much research to say for certain whether relaxation therapy helps with IBS. Two small studies found that relaxation therapy reduced symptoms for more than half of the people with IBS.<sup>[45]</sup> But another study found that people who had relaxation therapy plus the usual treatments didn't feel any better than people who just got the usual treatments.<sup>[47]</sup>



## Yoga for irritable bowel syndrome

Yoga is an ancient spiritual practice from India. The yoga done by most people in the West focuses on stretching, breathing and relaxation, or meditation. The aim of yoga is to keep your mind and body healthy.

A small study looked at 22 men with irritable bowel syndrome.<sup>[48]</sup> It compared [drug treatment for diarrhoea](#) (loperamide) with yoga. Both treatments reduced symptoms, but the people practising yoga showed slightly more improvement.

## Meditation for irritable bowel syndrome

You can learn how to meditate to relax and clear your mind. One small study shows that meditation helps to reduce symptoms of pain and bloating caused by irritable bowel syndrome.<sup>[49]</sup>

People in the study had training in meditation at six weekly sessions. After a year of doing meditation, 8 in 10 people found their symptoms had improved.

### Glossary:

#### anus

The anus, which is at the end of the rectum, is where stools leave your body when you go to the toilet. Part of the anus is a muscle that helps you hold in the stool until you are on the toilet.

#### infection

You get an infection when bacteria, a fungus, or a virus get into a part of your body where it shouldn't be. For example, an infection in your nose and airways causes the common cold. An infection in your skin can cause rashes such as athlete's foot. The organisms that cause infections are so tiny that you can't see them without a microscope.

#### genes

Your genes are the parts of your cells that contain instructions for how your body works. Genes are found on chromosomes, structures that sit in the nucleus at the middle of each of your cells. You have 23 pairs of chromosomes in your normal cells, each of which has thousands of genes. You get one set of chromosomes, and all of the genes that are on them, from each of your parents.

#### Anxiety disorder

A range of conditions with features including apprehension, motor tension, and autonomic overactivity.

#### depression

Depression is a mental illness in which your mood is low and you feel sad most of the time. It can range from a mild illness through to a severe one in which you lose interest in life and may be suicidal.

#### haemorrhoids

Haemorrhoids are swollen veins in the anus. Sometimes you can see or feel them and sometimes they are inside the anus. Haemorrhoids can hurt and bleed. They usually happen when you strain a lot to pass a stool.

#### anaemia

Anaemia is when you have too few red blood cells. Anaemia can make you get tired and breathless easily. It can also make you look pale. Anaemia can be caused by a number of different things, including problems with your diet, blood loss and some diseases.

#### migraine headaches

These are severe headaches that last four to 72 hours. They often cause other symptoms such as queasiness (nausea) or being extra-sensitive to sound or light.

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## **asthma**

Asthma is a disease of the lungs. It makes you wheeze, cough and feel short of breath. Asthma attacks are caused by inflammation and narrowing of your airways, which makes it hard for air to pass in and out of your lungs.

## **liver**

Your liver is on the right side of your body, just below your ribcage. Your liver does several things in your body, including processing and storing nutrients from food, and breaking down chemicals, such as alcohol.

## **inflammation**

Inflammation is when your skin or some other part of your body becomes red, swollen, hot, and sore. Inflammation happens because your body is trying to protect you from germs, from something that's in your body and could harm you (like a splinter) or from things that cause allergies (these things are called allergens). Inflammation is one of the ways in which your body heals an infection or an injury.

## **X-ray**

X-rays are pictures taken of the inside of your body. They are made by passing small amounts of radiation through your body and then onto film.

## **colonoscopy**

A colonoscopy is a way for your doctor see the inside of your colon and rectum. A tube called a colonoscope is put into your bowel through your anus. A camera at the end of the tube shows your colon and rectum on a screen. If your doctor finds any small polyps or cancers, he or she may be able to remove them using a wire attached to the end of the colonoscope. However, large polyps and cancers may need surgery.

## **rectum**

The rectum is the last 15 to 20 centimetres (six to eight inches) of the large intestine, ending with the anus (where you empty your bowels from).

## **colon**

Your colon is the first 2 metres (6 feet) of your large intestine. During digestion, food travels from your stomach to your small intestine and then to your large intestine. What's not digested then leaves your body as a stool.

## **immune system**

Your immune system is made up of the parts of your body that fight infection. When bacteria or viruses get into your body, it's your immune system that kills them. Antibodies and white blood cells are part of your immune system. They travel in your blood and attack bacteria, viruses and other things that could damage your body.

## **hormones**

Hormones are chemicals that are made in certain parts of the body. They travel through the bloodstream and have an effect on other parts of the body. For example, the female sex hormone oestrogen is made in a woman's ovaries. Oestrogen has many different effects on a woman's body. It makes the breasts grow at puberty and helps control periods. It is also needed to get pregnant.

## **thyroid gland**

Your thyroid gland is a small organ that sits in your neck, just in front of your windpipe. It sends out a hormone called thyroxine. This acts on receptors within cells. By acting on the receptors it gives the cells a message to speed up their metabolism and work harder.

## **ultrasound**

Ultrasound is a tool doctors use to create images of the inside of your body. An ultrasound machine sends out high-frequency sound waves, which are directed at an area of your body. The waves reflect off parts of your body to create a picture. Ultrasound is often used to see a developing baby inside a woman's womb.

## **dietitian**

A dietitian is a health professional who is trained to give people advice about what they eat.

## **bacteria**

Bacteria are tiny organisms. There are lots of different types. Some are harmful and can cause disease. But some bacteria live in your body without causing any harm.

## **placebo**

A placebo is a 'pretend' or dummy treatment that contains no active substances. A placebo is often given to half the people taking part in medical research trials, for comparison with the 'real' treatment. It is made to look and taste identical to the drug treatment being tested, so that people in the studies do not know if they are getting the placebo or the 'real' treatment. Researchers often talk about the 'placebo effect'. This is where patients feel better after having a placebo treatment because they expect to feel better. Tests may indicate that they actually are better. In the same way, people can also get side effects after having a placebo treatment. Drug treatments can also have a 'placebo effect'. This is why, to get a true picture of how well a drug works, it is important to compare it against a placebo treatment.

## **allergic reaction**

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You have an allergic reaction when your immune system overreacts to a substance that is normally harmless. You can be allergic to particles in the air you are breathing, like pollen (which causes hay fever) or to chemicals on your skin, like detergents (which can cause a rash). People can also have an allergic reaction to drugs, like penicillin.

## systematic reviews

A systematic review is a thorough look through published research on a particular topic. Only studies that have been carried out to a high standard are included. A systematic review may or may not include a meta-analysis, which is when the results from individual studies are put together.

## cognitive behaviour therapy

Cognitive behaviour therapy (CBT) is a type of talking treatment (psychotherapy). It is based on the idea that the negative thoughts and beliefs people have play an important role in how they feel and how they act. CBT helps people identify, look at and change unwanted thoughts, feelings and behaviours.

## randomised controlled trials

Randomised controlled trials are medical studies designed to test whether a treatment works. Patients are split into groups. One group is given the treatment being tested (for example, an antidepressant drug) while another group (called the comparison or control group) is given an alternative treatment. This could be a different type of drug or a dummy treatment (a placebo). Researchers then compare the effects of the different treatments.

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